

CLAIMS

1. A compressor with an electromotive swash plate, comprising:  
a front housing having a front discharge chamber for discharging a firstly  
compressed refrigerant;  
5 a rear housing having a rear suction chamber communicating with the front  
discharge chamber to receive the firstly compressed refrigerant and a rear discharge  
chamber for discharging a secondly compressed refrigerant, the rear suction chamber  
and the rear discharge chamber being divided by a partition;  
a cylinder block disposed between the front and rear housings, the cylinder block  
10 being provided with a swash plate chamber receiving the swash plate, a plurality of  
bores in which respective pistons are slidably installed, a discharge gas passage for  
assigning a refrigerant flow between the front and rear housings;  
a driving shaft mounted in the cylinder block, the driving shaft being rotated by a  
motor received in a motor chamber formed adjacent to one of the front and rear  
15 housings; and  
a plurality of dual-head pistons reciprocating in the bore due to the inclination of  
the swash plate.
2. The compressor of claim 1, further comprising a transferring unit for  
20 transferring the refrigerant introduced into the swash plate chamber to the motor  
chamber and a recovering unit for recovering the refrigerant from the motor chamber to  
the cylinder bores.
3. The compressor of claim 2, wherein the transferring unit is a transferring  
25 passage formed through one of the front and rear housings to allow the swash plate  
chamber to communicate with the motor chamber.
4. The compressor of claim 2, wherein the recovering unit is a suction passage  
30 formed adjacent to one of the front and rear housings to allow the motor chamber to  
communicate with the cylinder bores.

5. The compressor of claim 1, wherein the front housing further comprises a front suction chamber communicating with the swash plate chamber through a low pressure communication passage formed on the cylinder block to receive the refrigerant.

5 6. The compressor of claim 1, wherein the rear suction chamber is formed around the rear discharge chamber of the rear housing.

7. The compressor of claim 1, wherein the rear discharge chamber is provided with a discharge passage defined by a discharge pipe for reducing a discharge pressure  
10 pulsation.

8. The compressor of claim 1, wherein the discharge gas passage is formed to allow the front discharge chamber to communicate with the rear suction chamber.